

Loads and Dynamics Harmonisation Working Group Work Plan

Flight Loads Survey Task

6 September 2001

The L&D HWG (Incorrectly stated as GSHWG) was tasked via FR Doc. 01-14659 as published 11 June 2001 to perform the following:

Specific Task

- Review 14 CFR Part 25, § 25.301 and JAR 25.301 for adequacy in addressing the issue of validation of flight load intensities and distribution. This review should include the consideration of:
 1. FAA advisory circular (AC) 25-14, High Lift and Drag Devices;"
 2. Relevant FAA issue papers and their implementation
 3. JAA Certification Review Items
- Develop a report recommending the any revisions to the rules (including cost estimates) and any advisory materials needed to address the above issues.

Schedule: This task is to be completed no later than June 28, 2002 is.

Work Methods

The Loads and Dynamics Harmonization Working Group will comply with the procedures adopted by ARAC. As a part of the procedures, the Loads and Dynamics Harmonization Working Group is submitting to the TAEIG this work plan for completion of the tasks, including the rationale for the plan.

A status report on the tasks will be provided at each meeting of ARAC held to consider Transport Airplane and Engine Issues.

Detailed Work Plan

The chairman of the HWG has appointed a task group, with a chairman and co-chairman, to handle the tasks with the intent of expediting the completion of the assigned task. The membership of the task group is provided via Attachment 1. The membership of the group consists of selected members from the HWG.

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The charter of the task group is to review and analyse the appropriate materials and data and to develop the draft reports, advisory material, or any other collateral documents that are found to be appropriate. The draft report is to include an economic evaluation. The work of this task group is to be accomplished between the HWG meetings and brought forward at each L&D HWG meeting for review and comment. Most of the work will be accomplished by teleconference and email. However the chairman of the task group may call task group meetings if required.

1. Review

- 14 CFR Part 25, § 25.301 and JAR 25.301 for adequacy in addressing the issue of validation of flight load intensities and distribution. This review should include the consideration of:

FAA advisory circular (AC) 25-14, High Lift and Drag Devices;"
Relevant FAA issue papers and their implementation
JAA Certification Review Items

- Existing airframe manufacturers practices and criteria for measuring flight loads magnitudes and distributions.

2. Identify issues

- What loads should be measured and how should they be measured
- How are measured flight loads currently used in the validation process
- How should they be used in the validation process
- When do differences in measured flight loads relative to certification design loads require evaluation require additional structural substantiation
- What is an appropriate error band for measured loads
- Under what circumstances can measured flight loads be used to show additional capability for increased maximum gross weights or design speed-altitude schedules

These are just some of the issues to be addressed.

3. Discuss and develop necessary rule changes / advisory material

Develop a Fast Track report that would provide the information for:

- a) An NPRM
- b) An AC
- c) Cost Analysis

4. Schedule

- a) Technical agreement 22 February 2002
- b) Deliverables submitted to TAEIG by early March 2002 (TOR date due to FAA is 28 June 2002)

Identification of Affected Parties

The likely parties to be affected by the harmonization activity are the airframe manufacturers and the JAR Structures Study Group.

Expertise Required

The Group has determined that we have the needed expertise to proceed with the tasks.

Submitted to TAEIG by:

Larry Hanson
Chairman of L&D HWG

Attachment 1

Flight Loads Survey Task Group

Name	Organization
Wim Doeland (Chairman)	RLD
Jack Grabowski	Transport Canada
Hank Offerman	FAA Transport Directorate
Tony Linsdell (Co-chairman)	Bombardier - Canadair
Gennaro Squeglia	Aerospatiale Matra-Airbus
Mark Ray	Gulfstream Aerospace
Mike Green	Boeing